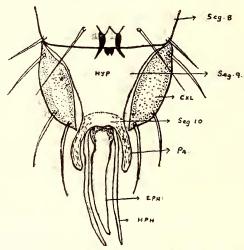
shape and the structure of the relative parts concerned. The coxal lobes which are heavily chitinised, bear anteriorly one pair and posteriorly two pairs of long setae and are easily distinguished from the subgenital plate or hypandrium. The coxites seem to be absent. The periandrium with its arching sides (endapophyses), is well developed and between them carry the epiphallus and the hypophallus. The epiphallus is wider anteriorly, gradually narrowing towards the posterior extremity and the hypophallus is almost uniformly slender.



Male genital armature of Ayyaria chaetophora Karny

Hyp—hypandrium CxL—coxal lobe PA—periandrium Eph—epiphallus HpH—hypophallus.

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Loyola College, Madras, 5th November, 1949.

Lecturer in Zoology.

## 22. OBSERVATIONS ON THE OCCURRENCE OF THE TICK. APONOMMA GERVAISI (LUCAS) ON VARANUS SP.

The genus Aponomma is represented in India by four species viz:—A. gervaisi (Lucas) including var. lucasi Warb., A. laeve Neum., A. pattoni Neum., and A. trimaculatum (Lucas). From Orissa only the species A. gervaisi and the variety lucasi have been recorded. The species A. gervaisi is known only from the Barakuda Island of the Chilka Lake on Varanus bengalensis, both males and females having been collected on the host.

On the 9th July, 1945 a 'Godhi' (Oriya)—Varanus sp. measuring 3 feet  $7\frac{1}{2}$  inches from the tip of the head to the tip of the tail was-

Sharif, M. (1928): A revision of the Indian Ixididae. Rec. Ind., Mus. Cal... 30: 333-341.

killed in the city of Cuttack. On examination I found that immediately posterior to the anal aperture there was a cluster of silvery shining ticks. A total number of 32 females of A. gervaisi was collected in this cluster and no male specimen was obtained.

Sixteen specimens were measured of material preserved in formalin. The body length excluding the rostrum which is usually bent almost at right angles to the body as is usually the case in members belonging to Acari, varied from 2.2 to 2.7 mm. with an average of 2.3 mm. in length and from 2.2 to 3.0 mm. with an average of 2.6 mm. in breadth. Thus the breadth was definitely longer than the length.

The infection of ticks immediately posterior to the anal aperture

may be due to the softer nature of the area.

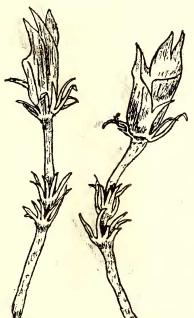
My thanks are due to Mr. E. Browning of the British Museum (Natural History) for the identification of the ticks.

London, 23rd January, 1950.

BASANT KUMAR BEHURA

## 23. REDUPLICATION IN THE EPICALYX OF HIBISCUS L. (With a text figure)

Malvaceae is a Natural Order where the flowers often possess and epicalyx. Hibiscus rosa-sinensis L., (N. O. Malvaceae) is a species-



Two views of same Velox flower showing calyx and epicalyx only.

much cultivated and the flowers possess an epicalyx of a single whorl of free bracteoles at the base of the calyx tube commonly consisting of 6-7 bracteoles.